

REMARKS

Claims 1-24 and 26-28 are now pending in the application. Claims 1, 10, 13, 19, 24, and 26 are amended. Claim 25 is cancelled. Support for the amendments can be found in the originally filed specification at paragraphs [0007], [0023], and [0026]-[0031]. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 102

Claims 1-5, 8-9, 12-16, and 21-28 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Fussell (U.S. Pat. No. 4,023,071). This rejection is respectfully traversed.

The teachings of Fussell are generally directed toward a transient and surge protection apparatus. In particular, the Examiner relies on Fussell to teach a varistor connected in series with a gas discharge tube (GDT) in a circuit having a live line, a second line, and a ground line. The GDT of Fussell is taught to be an "indicator lamp" such as a neon lamp, which functions merely to alert the user rather than clamp voltage. Neon lamps suitable for the application of Fussell typically have a trigger voltage less than 100V, and are therefore unsuitable for use in clamping voltage during hi-pot testing. Accordingly, Fussell does not teach use of a GDT having a trigger voltage greater than 1230V.

Applicant's claimed invention is generally directed toward a motor drive for an electric machine, and method for insulation testing a motor drive for an electric machine. In particular, Applicant's claimed invention is directed toward use of a GDT having a trigger voltage greater than 1230V. For example, independent claim 1, especially as

amended, recites, "the trigger voltage is greater than 1230V." Claims 13 and 24, especially as amended, recite similar subject matter. Support for the amendments can be found in the originally filed specification at paragraphs [0007], [0023], and [0026]-[0031]. Therefore, Fussell fails to teach all of the limitations of the independent claims.

Accordingly, Applicants respectfully request the Examiner reconsider and withdraw the rejection of independent claims 1, 13, and 24 under 35 U.S.C. § 102(b), along with rejection on these grounds of all claims dependent therefrom.

REJECTION UNDER 35 U.S.C. § 103

Claims 6 and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Fussell (U.S. Pat. No. 4,023,071) in view of Harlan et al. (U.S. Pat. No. 5,606,232). This rejection is respectfully traversed.

The teachings of Fussell are generally directed toward a transient and surge protection apparatus. In particular, the Examiner relies on Fussell to teach a varistor connected in series with a gas discharge tube (GDT) in a circuit having a live line, a second line, and a ground line. The GDT of Fussell is taught to be an "indicator lamp" such as a neon lamp, which functions merely to alert the user rather than clamp voltage. Neon lamps suitable for the application of Fussell typically have a trigger voltage less than 100V, and are therefore unsuitable for use in clamping voltage during hi-pot testing. Accordingly, Fussell does not teach use of a GDT having a trigger voltage greater than 1230V.

The teachings of Harlan et al. are generally directed toward a DC on line AC brushless motor. In particular, the Examiner relies on Harlan et al. to teach a rectifier.

However, Harlan et al. do not teach, suggest, or motivate use of a GDT having a trigger voltage greater than 1230V.

Applicant's claimed invention is generally directed toward a motor drive for an electric machine, and method for insulation testing a motor drive for an electric machine. In particular, Applicant's claimed invention is directed toward use of a GDT having a trigger voltage greater than 1230V. For example, independent claim 1, especially as amended, recites, "the trigger voltage is greater than 1230V." Claim 13, especially as amended, recites similar subject matter. Support for the amendments can be found in the originally filed specification at paragraphs [0007], [0023], and [0026]-[0031]. Therefore, Fussell and Harlan et al. fail to teach all of the limitations of the independent claims. These differences are significant because the recited trigger voltage allows the surge protector to effectively clamp voltage during a surge without interfering with hi-pot testing of an electric machine as discussed at paragraphs [0007], [0023], and [0026]-[0031].

Accordingly, Applicants respectfully request the Examiner reconsider and withdraw the rejection of dependent claims 6 and 17 under 35 U.S.C. § 103(a) in view of their dependence from allowable base claims 1 and 13.

Claims 7 and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Fussell (U.S. Pat. No. 4,023,071) in view of Harlan et al. (U.S. Pat. No. 5,606,232) and Nakamura (U.S. Pub. No. 2002/0163820). This rejection is respectfully traversed.

The teachings of Fussell are generally directed toward a transient and surge protection apparatus. In particular, the Examiner relies on Fussell to teach a varistor connected in series with a gas discharge tube (GDT) in a circuit having a live line, a

second line, and a ground line. The GDT of Fussell is taught to be an “indicator lamp” such as a neon lamp, which functions merely to alert the user rather than clamp voltage. Neon lamps suitable for the application of Fussell typically have a trigger voltage less than 100V, and are therefore unsuitable for use in clamping voltage during hi-pot testing. Accordingly, Fussell does not teach use of a GDT having a trigger voltage greater than 1230V.

The teachings of Harlan et al. are generally directed toward a DC on line AC brushless motor. In particular, the Examiner relies on Harlan et al. to teach a rectifier. However, Harlan et al. do not teach, suggest, or motivate use of a GDT having a trigger voltage greater than 1230V.

The teachings of Nakamura are generally directed toward a power converter apparatus using power device. In particular, the Examiner relies on Nakamura to teach a doubler type rectifier. However, Nakamura does not teach, suggest, or motivate use of a GDT having a trigger voltage greater than 1230V.

Applicant’s claimed invention is generally directed toward a motor drive for an electric machine, and method for insulation testing a motor drive for an electric machine. In particular, Applicant’s claimed invention is directed toward use of a GDT having a trigger voltage greater than 1230V. For example, independent claim 1, especially as amended, recites, “the trigger voltage is greater than 1230V.” Claim 13, especially as amended, recites similar subject matter. Support for the amendments can be found in the originally filed specification at paragraphs [0007], [0023], and [0026]-[0031]. Therefore, Fussell, Harlan et al. and Nakamura fail to teach all of the limitations of the independent claims. These differences are significant because the recited trigger

voltage allows the surge protector to effectively clamp voltage during a surge without interfering with hi-pot testing of an electric machine as discussed at paragraphs [0007], [0023], and [0026]-[0031].

Accordingly, Applicants respectfully request the Examiner reconsider and withdraw the rejection of independent claims 7 and 18 under 35 U.S.C. § 103(a) in view of their dependence from allowable base claims 1 and 13.

ALLOWABLE SUBJECT MATTER

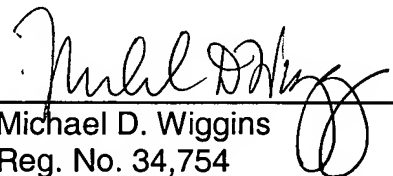
The Examiner states that claims 10-11 and 19-20 would be allowable if rewritten in independent form. Accordingly, Applicant has amended claim 10 to include the limitations of the base claim and any intervening claims, and has amended claim 19 to include subject matter similar to that recited in amended claim 10. Therefore, claims 10-11 and 19-20 should now be in condition for allowance.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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